

FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

Atty Docket  
0652.1350000Serial No.  
08/249,671Applicant  
Hauptmann et al.Filing Date  
May 26, 1994Group 1812  
~~To Be Assigned~~

## U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Sub-class	Filing Date
<i>DF</i>	AA1	5,196,323	3/23/93	Bodo et al.	435	69.51	6/12/91
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## FOREIGN PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Country	Class	Sub-class	Translation
<i>DF</i>	AL1	0 115 613	08/15/84	Europe			Abstract
<i>DF</i>	AM1	WO 89/03225	04/20/89	PCT			Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>DF</i>	AR	<u>1</u>	Adolf, G.R., Monoclonal Antibodies and Enzyme Immunoassays Specific for Human Interferon(INF) $\omega$ 1: Evidence that IFN- $\omega$ 1 is a Component of Human Leukocyte IFN, <i>Virology</i> 175:410-417 (1990)
	AS	<u>1</u>	Beltz et al., Isolation of Multigene Families and Determination of Homologies by Filter Hybridization Methods, <i>Meth. Enzymol.</i> 100:266-285 (1983)
<i>DF</i>	AT	<u>1</u>	Bodo & Maurer-Fogy, Molecular Species of Recombinant Human Interferon Alpha 2 Detected in Affinity Purified Preparations. In: <i>The Biology of the Interferon System</i> (ed. Stewart, W.E., II Schellekens, H.), Elsevier Scientific Publishing Co., Amsterdam, pp. 59-64 (1985)

Examiner

DAVID L. FITZGERALD  
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AN						Yes No
AO						Yes No
AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	2	Breitling et al., Secretory expression in <i>Escherichia coli</i> and <i>Bacillus subtilis</i> of human interferon $\alpha$ genes directed by staphylokinase signals, <i>Mol. Gen. Genet.</i> 217:384-391 (1989)
AS	2	Chang et al., Nucleotide sequence of the alkaline phosphatase gene of <i>Escherichia coli</i> , <i>Gene</i> 44:121-125 (1986)
AT	2	Derwent World Patent Index, English language abstract of European Patent 0 115 613.

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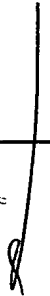
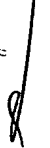
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	AR	<u>3</u>	Dworkin-Rastl et al., Construction of expression plasmids producing high levels of human leukocyte-type interferon in <i>Escherichia coli</i> , Gene 21:237-248 (1983)
	AS	<u>3</u>	Fuh et al., The Human Growth Hormone Receptor, <i>J. Biol. Chem.</i> 265(6):3111-3115 (1990)
	AT	<u>3</u>	Goeddel et al., Human leukocyte interferon produced by <i>E. coli</i> is biologically active, <i>Nature</i> 287:411-416 (1980)

Examiner

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	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>4</u>	Goeddel et al., The structure of eight distinct cloned human leukocyte interferon cDNAs, Nature 290:20-26 (1981)
	AS	<u>4</u>	Hauptmann & Swetly, A novel class of human type I interferons, Nucl. Acid Res. 13(13):4739-4749 (1985)
	AT	<u>4</u>	Ho et al., Site-directed mutagenesis by overlap extension using the polymerase chain reaction, Gene 77:51-59 (1989)

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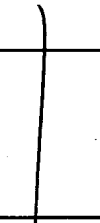

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	AP						Yes No

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	AR	<u>5</u>	Kafatos et al., Determination of nucleic acid sequence homologies and relative concentrations by a dot hybridization procedure, <i>Nucl. Acids Res.</i> 7(6):1541-1552 (1979)
	AS	<u>5</u>	Lee et al., Characterization of Gene Encoding Heat-Stable Toxin II and Preliminary Molecular Epidemiological Studies of Enterotoxigenic <i>Escherichia coli</i> Heat-Stable Toxin II Producers, <i>Infection and Immunity</i> 42(1):264-268 (1983)
	AT	<u>5</u>	Mantei et al., The nucleotide sequence of cloned human leukocyte interferon cDNA, <i>Gene</i> 10:1-10 (1980)

Examiner

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	AR	<u>6</u>	Owen & Pitcher, Current Methods for Estimating DNA Base Composition and Levels of DNA-DNA Hybridization, <i>Chemical Methods in Bacterial Systematics</i> , pp.67-93 (1985)
	AS	<u>6</u>	Picken et al., Nucleotide Sequence of the Gene for Heat-Stable Enterotoxin II of <i>Escherichia coli</i> , <i>Infection and Immunity</i> 42(1):269-275 (1983)
	AT	<u>6</u>	Shuttleworth et al., Sequence of the gene for alkaline phosphatase from <i>Escherichia coli</i> JM83, <i>Nucl. Acid Res.</i> 14(2):8689 (1986)

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	AN						Yes No
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	AR	7	Streuli <i>et al.</i> , At Least Three Human Type $\alpha$ Interferons: Structure of $\alpha 2$ , <i>Science</i> 209:1343-1347 (1980)
	AS	7	Thatcher & Panayotatos, Purification of Recombinant Human IFN- $\alpha 2$ , <i>Methods Enzymol.</i> 119:166-177 (1986)
	AT	7	Twigg and Sherratt, Trans-complementable copy-number mutants of plasmid ColE1, <i>Nature</i> 283:216-218 (1980)

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